

IN THE CLAIMS

Please cancel claims 20-41, without prejudice.

1. A electronic control module, comprising:
a housing having a first aperture, and
a substrate disposed within the housing and having a second aperture positioned adjacent to the first aperture, and including a hydrophobic vent assembly disposed over the second aperture and adheringly coupled to the substrate, and adapted to permit egress with respect to the housing of a gas therethrough.
2. The module as recited in claim 1, wherein the hydrophobic vent assembly comprises a fluorinated polymer membrane coupled to a structural screen.
3. The module as recited in claim 3, wherein the fluorinated polymer comprises GORE-TEX®.
4. The module as recited in claim 1, wherein the structural screen is a 180-mesh copper soldered to the substrate.
5. The module as recited in claim 1, wherein the hydrophobic vent assembly comprises a hydrophobic coating disposed over a structural screen, wherein the structural screen is coupled to the substrate.
6. The module as recited in claim 5, wherein the hydrophobic coating comprises Wacker Semicosil 964®.

7. The module as recited in claim 1, wherein at least one electrical component located on the substrate electrically couples to ground via an electrical pathway extending through the second aperture, the electrical pathway being electrically coupled to the housing.

8. The module as recited in claim 1, wherein the hydrophobic vent assembly is adheringly coupled to the substrate via solder.

9. A vehicle control system, comprising:
a vehicle; and
a vehicle control module coupled to the vehicle and adapted to adjust at least one operating parameter of the vehicle in response to at least one operating condition, the module comprising:
a housing having a first aperture; and
a substrate disposed within the housing and having a second aperture positioned adjacent the first aperture, wherein the substrate comprises a waterproof vent assembly adheringly coupled to the substrate, the assembly being adapted to permit egress with respect to the housing of a gas therethrough.

10. The system as recited in claim 9, wherein the at least one operating parameter relates to an engine disposed in the vehicle.

11. The system as recited in claim 9, wherein the at least one operating parameter relates to a transmission disposed in the vehicle.

12. The system as recited in claim 9, wherein the waterproof vent assembly comprises a fluorinated polymer membrane coupled to a structural screen.
13. The system as recited in claim 12, wherein the fluorinated polymer comprises GORE-TEX®.
14. The system as recited in claim 9, wherein the waterproof vent assembly comprises a hydrophobic conformal coating disposed over a structural screen.
15. The system as recited in claim 9, wherein the vehicle comprises an automobile.
16. The system as recited in claim 9, wherein the housing comprises aluminum.
17. The system as recited in claim 9, wherein at least one component located on the substrate is electrically coupled to ground via an electrical pathway extending through the second aperture, the electrical pathway being electrically coupled to the housing.
18. The system as recited in claim 9, wherein the substrate is adhesively secured to the housing.
19. The system as recited in claim 9, wherein the waterproof assembly is adheringly coupled to the substrate via solder.
- 20 – 41. (cancelled)